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Reference for Dr. Julio Castrillón Candás

To Whom It May Concern:

I am writing this reference on behalf of Dr. Julio Castrillón Candás. I have known Dr. Castrillón Candás for over six years, including three years as his Ph.D. thesis advisor. Julio started his doctoral research with me in 1997 after completing a Master of Science in Electrical Engineering and Computer Science at MIT. Since then, I have had the opportunity to observe him closely in both research and teaching, and I believe that I am qualified to comment on his abilities. Julio is clearly one of the stronger students I have advised to date. Throughout his Ph.D. work, he demonstrated himself to be a solid researcher, working both individually and in a team environment. After his graduation, Julio continued his excellent work as a Postdoctoral Associate with me.

A critical point that differentiates Dr. Castrillón Candás from many of his peers is his cross-disciplinary training, which makes him a particularly versatile researcher. He has a broad knowledge of scientific computing, and has worked on various aspects of numerical modeling, control theory and computational biology in his research. His Ph.D. thesis work focused on developing a general class of wavelet-based computational methods for solving partial differential equations (PDEs) that arise in large-scale numerical simulations with complex 3D geometry. Julio's contributions have resulted in several publications in very respectable journals, including articles on the wavelet solution of PDEs in the SIAM Journal on Scientific Computing and the International Journal for Numerical Methods in Engineering, and an article on the fast estimation of Karhunen-Loève eigenfunctions in IEEE Transactions on Signal Processing. As a teaching assistant, recitation instructor and presenter at conferences, Julio showed himself to be well spoken, insightful, organized and reliable. He was an excellent teaching assistant in my course on wavelets, filter banks and applications - a subject I jointly taught with Professor Gilbert Strang of the MIT Mathematics Department.

Since leaving MIT, Dr. Castrillón Candás has used the momentum of his Ph.D. work to branch out into interesting problems in computational biology at the University of Texas. From all accounts, he has been extremely successful in his continuing pursuits. I believe that Dr. Castrillón Candás is well positioned to continue applying his mathematical and scientific computation work to the biological sciences or elsewhere. I therefore recommend him strongly.

Sincerely,

Kevin Amaratunga